

# Introduction to Selected Operations

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Non-Modelling

# CHANGE-T

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Used to Change the Time Step of a Time Series

- Method depends on Datatype (as with RRS)
- INST
  - Increasing – pick off
  - Decreasing – linear interpolation
- MEAN
  - Increasing – compute average
  - Decreasing – each value set to same value as initial
- ACCM
  - Increasing – add
  - Decreasing – divide
- MEAN → INST

# MERGE-TS

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Allows you to fill in missing data by merging time series or to switch time series

- You can merge two time series so that data from the secondary time series fill in missing data in the primary time series.
- You can switch between two precipitation or instantaneous discharge time series.
  - ▶ Use the SWITCH-TS mod to select the preferred time series.

# ADJUST-Q

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Used to Integrate the Observations and the Simulations

ADJUST-Q blends the observed data and the simulations to create and **adjusted** time series, QINE.

Can use Instantaneous or Mean data.

Where there are observations, the **adjusted** time series equals the simulation.

Where there are no observations, the difference (or ratio) between the observed and simulated is interpolated or extrapolated.

# FFG

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## Introduction to Flash Flood Guidance

- Flash Flood Guidance is the number of inches of rain required to bring the river up to bankfull from the current conditions.
- Threshold Runoff is the depth of runoff (inches) equivalent to the bankfull flow (approximately 2 year return flow?).
- Threshold Runoff is a static parameter computed with ThreshR.

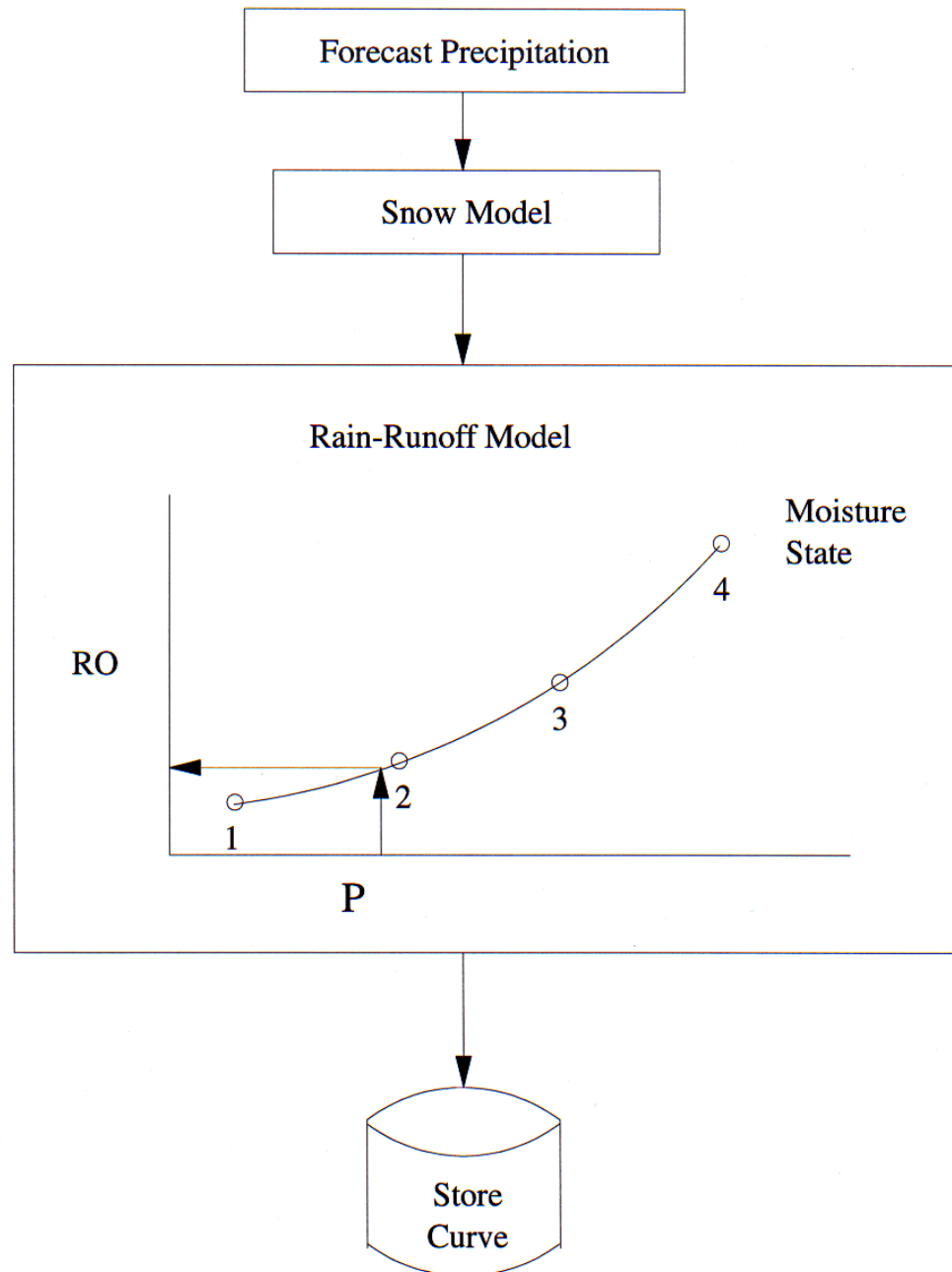
# FFG

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## The Flash Flood Operation in OFS

- FFG operation computes Rainfall/Runoff curves that capture the relationship between Rainfall and Runoff for the current conditions on a basin.
- Iterates to find the precipitation for 0.1 and 2.5 inches of runoff.
- Computes curves for 1, 3, 6 12, and 24 hour durations.
- These curves are passed to the FFG system which uses them to determine how much rain is needed to create the Threshold Runoff.
- Be careful of your OFS segment and AREA definitions, as they may be used in the FFG system.

# FLASH FLOOD GUIDANCE OPERATION



# FFG System

## Computing the Guidance

